U.S. DEPARTMENT OF ENERGY

Center for Science of Precision Multifunctional Nanostructures for Electrical Energy Storage

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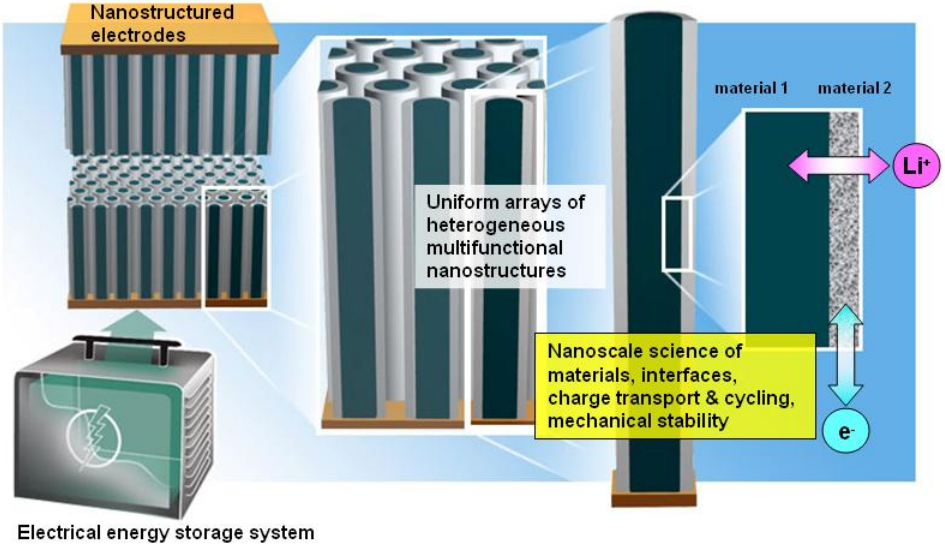
The EFRC will pursue multifunctional nanostructures as the basis for a next generation of high performance electrical energy storage to:

- power **electric vehicles** over long distances and recharge quickly, and
- capture, hold, and deliver energy from **renewable sources**.



EFRC features:

- Metal oxide and silicon nanowires to hold and cycle charge
- Carbon-nanowire composite nanostructures for faster charge transport and structural stability during charge cycling
- Fundamental understanding of nanostructure synthesis, properties, and electrochemical behavior, supported by novel instruments and theory
- Uniform, predictable structures for scientific analysis and as prototypes of massive arrays in future technology

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